

Remarks/Arguments

Applicants thank the Examiner for careful consideration of the application.

Please amend claim 33.

I. REJECTIONS UNDER 35 U.S.C. §103(a)

Examiner has rejected claims 1-4, 9-14, 16, 18-20, and 24-34, under 35 U.S.C. § 103(a) as being unpatentable over Kawabe et al. (U.S. 6,166,722, "Kawabe") in view of Yong (U.S. 6,088,0221, "Yong") and Ikehara et al. (U.S. 6,400,353, "Ikehara"). This rejection is respectfully traversed with regard to claims 1-4, 9-14, 16, 18-20, and 24-34 since neither of the cited references, taken either individually, or in combination therewith, teach, suggest, or mention the claimed invention.

To establish a prima facie case of obviousness, the prior art must suggest the desirability of the claimed invention; a reasonable expectation of success is required; and all claim limitations must be taught or suggested by the prior art. (MPEP §2143). These requirements are not met here.

In regards to independent claims 1 and 24, Examiner correctly states neither Kawabe nor Yong disclose, teach, or suggest, and Ikehara also does not disclose, teach, or suggest,

"a single spool *cable receiver rotatably mounted to the housing*; a cable . . . mounted to the cable receiver; and *a tracking device having at least one component of the tracking device disposed on or within the cable receiver*, wherein the *tracking device generates signals based on movement of the pointing device*, wherein the pointing device has a first mode with *a first portion of the cable having a first length external to the pointing device* and a second portion of the cable wound around the cable receiver; and a second

mode with the first portion of the cable having a second length external to the pointing device less than the first length," as it is disclosed, defined, and claimed in independent claims 1 and 24 by Applicants in the instant specification. *Emphasis added.*

Kawabe discloses, "[t]he pointing device 40 is electrically connected to the apparatus main body 44 by means of a cable 52 having a predetermined length." Col. 6, lines 35-37. Kawabe further discloses, "[t]he cable 52 is preferably wound in the apparatus main body 44 by means of a cable winding device (not shown) when the pointing device 40 is stored in the storage section 46." Col. 6, lines 50-53. Thus, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable.

Yong teaches, "[t]he body 300 may include a reel assembly 314 capable of alternately extending and retracting the cord 316 between a fully extended length and a fully retracted length (see FIG. 2). The reel assembly 314 preferably comprises a frame or housing 318 disposed within housing 302 of the body 300." Col. 5, lines 57-61. Yong also teaches, "[a] rotatable ball 310 may extend from the bottom surface 306 for contacting a work surface . . . whereupon movement of the body 300 across the work surface induces rotation of the ball 310. Electronic encoders (not shown) sense rotation of the ball 310, and generate a signal indicative of the ball's rotation to control movement of a cursor in the display area of the computer's display." Thus, Yong teaches a tracking device (i.e. the ball 310 and encoders (not shown)) disposed within body 300 of the pointing device and a reel assembly 314 having a frame or housing 318 separating reel assembly 314 from the tracking device (see Figs. 3a and 3b).

First, Ikehara does not disclose, teach, or suggest "*a single spool cable receiver rotatably mounted to the housing; a cable . . . mounted to the cable receiver; and a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device,*" as it is disclosed, defined, and claimed in

independent claims 1 and 24 by Applicants in the instant specification. *Emphasis added.* Ikehara teaches, "a pointing device of the present invention, a cursor moving operation and a click operation are separated and applied to different switches, if necessary, with a cloth sheet." Col. 3, lines 30-33. Ikehara, also, teaches, "the numeral 5 is a cable to connect the cursor-moving switch 1 to the controller 4. The numeral 6 designates cables to connect the clicking switches 2 to the controller 4. The numeral 7 designates a cable to connect the controller 4 to a mouse input terminal of a personal computer." Col 3, lines 59-64 (emphasis added). In still other embodiments, Ikehara teaches "[n]umeral 25 is a cable to connect the cursor moving switch 21 to the controller 24. Reference number 26 depicts a cable to connect the clicking switches 22 to the controller 24, and reference numeral 27 is a cable to connect a mouse-input terminal of the personal computer to the controller 24." Col. 6, lines 8-13. Thus, Ikehara teaches a pointing device that separates the clicking operation of switches normally found on a computer mouse from the cursor moving operation. Applicants would like to direct Examiner's attention to Figs. 1, 2a, 2b, 6, 7, 8a, 8b, 9a, and 14a, which all show various cables connected to various switches and cursor moving devices; however, none of the figures show, and Applicants have been unable to find any description within the specification that describes or suggests utilizing a rotatably mounted cable receiver having at least one component of a tracking device disposed on or within the rotatable cable receiver. Thus, Ikehara does not disclose, teach, or suggest, "*a single spool cable receiver rotatably mounted to the housing; a cable . . . mounted to the cable receiver; and a tracking device having at least one component of the tracking device disposed on or within the cable receiver.*" Ikehara is silent on both a rotatable cable receiver and a component disposed on or within the cable receiver. Ikehara provides neither a motivation nor does Ikehara provide any reasonable expectation of success since aggregating together various parts using Applicants' instant specification as a template does not establish a *prima facie* case of obviousness. Thus, the Examiner's suggested combination of Kawabe, Yong, and Ikehara does not teach the present invention as recited in independent claims 1 and 24, and thus neither suggests the desirability of the claimed invention; nor that all claim limitations must be taught or suggested by the prior art sufficient to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly,

Applicants assert that the rejection has been overcome. Applicants therefore respectfully request that the rejection under 35 U.S.C. §103(a) for independent claims 1 and 24 be withdrawn.

As noted above Ikehara does not teach or suggest a cable receiver, and does not teach or suggest at least one component of the tracking device disposed on or within the cable receiver. All words in a claim must be considered in judging the patentability of that claim against the prior art. MPEP 2143.03, (*citing In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Thus, the combination of Kawabe, Yong, and Ikehara does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection has been overcome. Applicants therefore respectfully request that the rejection under 35 U.S.C. §103(a) for independent claims 1 and 24 be withdrawn.

In regards to independent claim 25, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "an optical tracking device having at least one optical component disposed within the cable receiver," the optical tracking device including a sensor, a lens, and a light source, wherein the tracking device generates signals based on movement of the pointing device," as it is disclosed, defined, and claimed in independent claim 25 by Applicants in the instant specification. *Emphasis added.* As noted above Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable. As noted above Yong teaches a tracking device (i.e. the ball 310 and encoders (not shown)) disposed within body 300 of the pointing device and a reel assembly 314 having a frame or housing 318 separating reel assembly 314 from the tracking device. As noted above Ikehara teaches a pointing device that separates the clicking operation of switches normally found on a computer mouse from the cursor moving operation. Ikehara does not disclose, teach, or suggest an optical tracking device having at least one optical component disposed within the cable receiver," as it is disclosed, defined, and claimed in independent claim 25 by Applicants in the instant specification. *Emphasis added.* Nor does Ikehara teach, "the optical tracking

device *including a sensor, a lens, and a light source*, wherein the tracking device generates signals based on movement of the pointing device," as it is disclosed, defined, and claimed in independent claim 25 by Applicants in the instant specification. *Emphasis added.* Ikehara teaches "four optical devices 31 operable as detecting elements of the operating direction opposingly disposed at two orthogonal axes (X-X, Y-Y) a cable 25 and inner wiring 25a to connect the cursor moving switch 21 to the controller 24 . . ." Col. 6, lines 55-59. The suggestion to utilize light emitting diodes(LEDs) and photosensors to sense movement in two dimensions does not teach, suggest or disclose an optical tracking device having at least one component disposed on or within a rotatable cable receiver.

The components found in an opto-mechanical tracking device namely an LED and photodetector utilized to sense movement of a rubber ball does not disclose, teach, or suggest an optical tracking device, that includes no moving parts as disclosed, defined and claimed in the instant specification. Since Kawabe, Yong, and Ikehara are all silent on an optical tracking device having no moving parts, the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in independent claim 25, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection has been overcome. The cited prior art does not suggest the desirability of the claimed invention; a reasonable expectation of success in adapting the prior art to function in the manner of the present invention is absent; and all the claim limitations are not taught nor suggested by the prior art. The Applicants therefore respectfully request that the rejection under 35 U.S.C. §103(a) for independent claim 25 be withdrawn.

In regards to independent claim 26, none of the cited references Kawabe, Yong, or Ikehara disclose, teach, or suggest, "*a rotatable control circuit having at least one transducer disposed on the cable receiver* converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," as it is disclosed, defined, and claimed in independent claim 26 by

the Applicants in the instant specification. *Emphasis added.* As noted above Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable. As noted above Yong teaches a tracking device (i.e. the ball 310 and encoders (not shown)) disposed within body 300 of the pointing device and a reel assembly 314 having a frame or housing 318 separating reel assembly 314 from the tracking device. As noted above Ikehara teaches a pointing device that separates the clicking operation of switches normally found on a computer mouse from the cursor moving operation. Ikehara does not disclose, teach, or suggest, a rotatable control circuit having at least one transducer disposed on the cable receiver converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," (i.e. neither Kawabe, Yong, nor Ikehara disclose, teach, or suggest a pointing device having an optomechanical tracking device that has a mechanical motion transfer mechanism (i.e. ball and rotary encoders) and at least one transducer (i.e. LED or photodetector) disposed on the rotatable cable receiver (i.e. cable receiver rotates when the cable is wound or unwound from the cable receiver, the tracking device moves or rotates when the housing is moved across a surface). That is both Yong and Ikehara teach where at least one component is fixed relative to the component that is in motion, whereas the instant specification teaches where at least one transducer is on the cable receiver which in turn is rotatable. Since Kawabe, Yong, and Ikehara are silent on "a rotatable control circuit having at least one transducer disposed on the cable receiver converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in independent claim 26. *Emphasis added.* Thus, Examiner's suggested combination does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, the Applicants assert that the rejection has been overcome. The cited prior art does not suggest the desirability of the claimed invention; a reasonable expectation of success in adapting the prior art to function in the manner of the present invention is absent; and all the claim limitations are not taught nor suggested

by the prior art. The Applicants therefore respectfully request that the rejection under 35 U.S.C. §103(a) for independent claim 26 be withdrawn.

In regards to independent claim 33, none of the cited references Kawabe, Yong, or Ikehara disclose, teach, or suggest, "a tracking device mounted to the cable receiver, the tracking device having an optical sensor for generating signals based on movement of the pointing device," as it is disclosed, defined, and claimed in independent claim 33 by the Applicants in the instant specification and has already been argued for independent claim 25 above. *Emphasis added.*

Further, in regards to independent claim 34, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, " a tracking device mounted to the cable receiver, comprising: a rotatable control circuit mounted to the cable receiver for producing position signals in response to movement of the housing," as it is disclosed, defined, and claimed in independent claim 34 by the Applicants in the instant specification and has already been argued for independent claim 24 above. *Emphasis added.*

More importantly in regards to independent claims 33 and 34, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest:

- "a switch capacitively coupled to the cable receiver wherein the switch generates a pointing signal to the display [see Figs. 4a and 4c in instant specification];"
- "a detent wherein the detent aligns the cable receiver to the housing [see Figs. 4c-4f in instant specification];"
- "a connector receiver formed in the housing which accepts the connector [see Figs. 4a and 5a in instant specification];"

as it is disclosed, defined, and claimed in independent claims 33 and 34 by the Applicants in the instant specification. Further, the instant specification discloses, defines, and independent claim 33 claims,

- "a lid, wherein the lid is disposed in an open position when the cable is being wound around the cable receiver, and the lid is

disposed in a closed position when covering the cable receiver [see 364 and 344 Fig. 4c in instant specification];"

- "a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface further comprising:

a depression formed in the exterior surface of the disk top, the depression having a diameter, and

an aperture within the depression less than the diameter of the depression [see Fig. 4a in instant specification];"

which Applicants have been unable to find any teaching, suggestion, or disclosure of in either Kawabe, Yong, or Ikehara. That is Kawabe, Yong, and Ikehara are silent on all of these claimed limitations. Further, the instant specification discloses, defines, and independent claim 34 claims,

- "a rotatable disk affixed to the cable receiver, and disposed within the opening in the cover [see Fig. 5d in instant specification];"

• "a tracking mechanism disposed in the housing . . . comprising: a first wheel having a polygonal edge surface [see Fig. 6d in instant specification];"

- a rotatable control circuit mounted to the cable receiver for producing position signals in response to movement of the housing, the rotatable control circuit having first and second transducers for receiving user commands indicating movement of the housing and producing first and second position signals in response thereto [see Fig. 6a in instant specification];"

which Applicants have been unable to find any teaching, suggestion, or disclosure of in either Kawabe, Yong, or Ikehara. That is Kawabe, Yong, and Ikehara are silent on all of these claimed limitations. Since Kawabe, Yong, and Ikehara are silent on all of these limitations the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach, suggest, or disclose the present invention as recited in independent claims 33 and 34, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under

MPEP §2143. Accordingly, the Applicants assert that the rejection has been overcome. The cited prior art does not suggest the desirability of the claimed invention; a reasonable expectation of success in adapting the prior art to function in the manner of the present invention is absent; and all the claim limitations are not taught nor suggested by the prior art. The Applicants therefore respectfully request that the rejections under 35 U.S.C. §103(a) be withdrawn for independent claims 33 and 34.

In regards to independent claim 27, as noted for independent claim 33 none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, a lid disposed in either an open or closed position. In addition, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "[a] method for storing a cable . . . comprising the steps of: . . . opening a lid disposed on the housing of the pointing device; providing access to a rotatable disk attached to the cable receiver; rotating the rotatable disk to wind the cable around the cable receiver; inserting the connector into the connector receiver; and closing the lid," as it is disclosed, defined, and claimed in independent claim 27 by the Applicants in the instant specification. *Emphasis added.* Since Kawabe, Yong, and Ikehara are silent on all of these limitations and in particular all are silent on a pointing device having a lid, the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in independent claim 27, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, the Applicants assert that the rejection has been overcome. The cited prior art does not suggest the desirability of the claimed invention; a reasonable expectation of success in adapting the prior art to function in the manner of the present invention is absent; and all the claim limitations are not taught nor suggested by the prior art. The Applicants therefore respectfully request that the rejections under 35 U.S.C. §103(a) be withdrawn for independent claim 27.

In regards to the dependent claims, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. MPEP

2143.03. In regards to dependent claims 2-4, 9-14, 16, 18-20, and 28-32 dependent claims 2-4, 9-14, 16, 18-20, and 29-32 are dependent upon independent claim 1, and dependent claim 28 is dependent upon independent claim 27 thus, dependent claims 2-4, 9-14, 16, 18-20, and 29-32 are therefore believed to be allowable as dependent upon a believed allowable claim. Accordingly, the Applicants assert that the rejection of dependent claims 2-4, 9-14, 16, 18-20, and 28-32 has been overcome. The Applicants therefore respectfully request that the rejections under 35 U.S.C. §103(a) be withdrawn for dependent claims 2-4, 9-14, 16, 18-20, and 28-32.

As noted above dependent claim 4 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "[a] switch [including] a link having a conductor portion capacitively coupled to the cable receiver," as it is disclosed, defined, and claimed in dependent claim 4 by the Applicants in the instant specification. *Emphasis added.* In addition, Applicants respectfully disagree with Examiner's statement at the bottom of page 3, "[r]egarding claims 3-4 Yong teaches a keyboard (412) and mouse and [sic] (414) for entering information . . ." Although Yong teaches using a switch to enter information none of the cited references Kawabe, Yong, or Ikehara disclose, teach, or suggest, "[a] switch [including] a link having a conductor portion capacitively coupled to the cable receiver." Since Kawabe, Yong, and Ikehara are all silent on "a conductor portion capacitively coupled to the cable receiver," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 4, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, the Applicants assert that the rejection of dependent claim 4 has been overcome and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 4.

As noted above dependent claim 9 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest "wherein the tracking device further

comprises an optical tracking device including a sensor, a lens, and a light source, wherein the optical tracking device optically tracks movement of the pointing device," as it is disclosed, defined, and claimed in dependent claim 9 by the Applicants in the instant specification. *Emphasis added.* In addition, Applicants respectfully disagree with Examiner's statement top of page 4 "[r]egarding claims 9 . . . Yong teaches an auxiliary memory (126) which includes optical device" The optical storage device taught in Yong is not an optical tracking device as disclosed, defined and claimed in the instant specification. Since Kawabe, Yong, and Ikehara are silent on "an optical tracking device including a sensor, a lens, and a light source," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 9, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 9 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 9.

As noted above dependent claim 10 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest " *a reference stop surface disposed in the housing; and a detent disposed in the housing*, the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing," as it is disclosed, defined, and claimed in dependent claim 10 by the Applicants in the instant specification. *Emphasis added.* Applicants agree that Yong teaches electric encoders sensing the rotation of the ball (Col. 1, lines 28-31 speak only to background material describing in general opto-mechanical tracking devices with no detail provided), however, Applicants respectfully disagree with Examiner's statement bottom of page 3 that such encoders disclose, teach, or suggest, "wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing." That is Yong does not teach, suggest, or disclose a

pointing device having a reference stop and detent. Since Kawabe, Yong, and Ikehara are silent on "wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing" the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 10, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 10 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 10.

As noted above dependent claim 29 is believed allowable as dependent upon a believed allowable independent claim. In addition, claim 29 is dependent upon dependent claim 10 that is also believed to be an allowable dependent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest "*wherein said detent further comprises an electrical switch,*" as it is disclosed, defined, and claimed in dependent claim 29 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement in middle of page 4 stating "Kawabe teaches a pointing device whose upper surface is provided with a sensor pad (40a)," teaches, suggests, or discloses "*wherein said detent further comprises an electrical switch.*" As noted above Yong does not teach, suggest, or disclose a pointing device having a reference stop and detent. Since Kawabe, Yong, and Ikehara are silent on "*wherein said detent further comprises an electrical switch,*" the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 29, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 29 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 29.

As noted above dependent claim 12 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "a lid having an open position providing access to the cable receiver and the lid having a closed position covering the cable receiver," as it is disclosed, defined, and claimed in dependent claim 12 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement top of page 4 stating "[r]egarding claims 12 . . . a cord (204) with fully extended length shown as phantom lines . . ." teaches, suggests, or discloses "a lid having an open position." As noted above in independent claim 33 Kawabe, Yong, and Ikehara are silent on a lid and thus are also silent on "a lid having an open position providing access to the cable receiver and the lid having a closed position covering the cable receiver," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 12, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 12 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 12.

As noted above dependent claim 13 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface, further comprising: a depression formed in the exterior surface of the disk top, the depression having a diameter, and adapted to accept a finger, and an aperture within the depression less than the diameter of the depression," as it is disclosed, defined, and claimed in dependent claim 13 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement top of page 4 "[r]egarding claims . . . 13 . . . Yong teaches an auxiliary memory (126) which includes optical device and different types of disks. . ." An optical device and different types of disks in Yong refers to storage devices and does not teach or suggest "a rotatable disk affixed to the cable receiver," as it is disclosed, defined and

claimed in the instant specification. As noted above in independent claim 33 Kawabe, Yong, and Ikehara are silent on "a rotatable disk affixed to the cable receiver," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 13, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 13 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 13.

As noted above dependent claim 14 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "*a connector receiver formed in the housing which accepts the connector,*" as it is disclosed, defined, and claimed in dependent claim 14 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement top of page 4, "[r]egarding claims . . . 14 Kawabe teaches the use of cable means for a pointing device." Although Kawabe does teach a cable means Kawabe is silent on a connector receiver in the pointing device housing. As noted above in independent claims 33 and 34 Kawabe, Yong, and Ikehara are silent on "a connector receiver formed in the housing which accepts the connector," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 14, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 14 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 14.

As noted above dependent claim 16 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "*a mechanical motion transfer mechanism disposed in the housing; and a rotatable control circuit having at least one*

transducer disposed on or within the cable receiver, and converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," as it is disclosed, defined, and claimed in dependent claim 16 by Applicants in the instant specification. *Emphasis added.* Applicants agree that Yong teaches electric encoders sensing the rotation of the ball (Col. 1, lines 28-31 speak only to background material describing in general opto-mechanical tracking devices with no detail provided); however, Applicants respectfully disagree with Examiner's statement bottom of page 3 that such encoders disclose, teach, or suggest "a rotatable control circuit having at least one transducer disposed on the cable receiver" converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing." As noted above in independent claims 26 Kawabe, Yong, and Ikehara are silent on "a rotatable control circuit having at least one transducer disposed on the cable receiver" converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 16, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 16 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 16.

As noted above dependent claim 18 is believed allowable as dependent upon a believed allowable independent claim. In addition dependent claim 18 is dependent upon dependent 16 argued above. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "wherein the rotatable control circuit further *comprises first and second transducers converting movement of the mechanical motion transfer mechanism* into first and second position signals in response thereto," as it is disclosed, defined, and claimed in dependent claim 18 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement top of page 4 "[r]egarding claims . . . 18, Yong teaches an auxiliary memory (126) which includes optical device and different types

of disks. . . ." An optical device and different types of disks in Yong refers to storage devices and does not teach or suggest, a "rotatable control circuit further comprising first and second transducers converting movement of the mechanical motion transfer mechanism," as it is disclosed, defined and claimed in the instant specification. As noted above in independent claim 34 Kawabe, Yong, and Ikehara are silent on "wherein the rotatable control circuit further comprises first and second transducers converting movement of the mechanical motion transfer mechanism into first and second position signals in response thereto" the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 18, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 18 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 18.

As noted above dependent claim 19 is believed allowable as dependent upon a believed allowable independent claim. In addition dependent claim 19 is dependent upon dependent claim 18 that in turn is dependent on dependent claim 16 both argued above. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "wherein the mechanical motion transfer mechanism further comprises: a first wheel with a polygonal edge surface rotatably mounted relative to the housing; and a second wheel rotatably mounted relative to the housing," as it is disclosed, defined, and claimed in dependent claim 19 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement top of page 4 stating "[r]egarding claims 12 . . . a cord (204) with fully extended length shown as phantom lines . . ." teaches, suggests or discloses "a first wheel with a polygonal edge surface rotatably mounted relative to the housing." As noted above in independent claim 34 Kawabe, Yong, and Ikehara are silent on "a first wheel with a polygonal edge surface rotatably mounted relative to the housing," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 19, and thus does not meet any of the three basic criteria that must be met to establish

a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 19 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 19.

As noted above dependent claim 30 is believed allowable as dependent upon a believed allowable independent claim. In addition, claim 30 is dependent upon dependent claim 19 that is dependent upon dependent claim 18 that is dependent upon claim 16 where 16, 18, and 19 are believed to be an allowable dependent claims. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "wherein the polygonal edge surface further comprises n flat reflective surfaces, wherein n is greater than 20," as it is disclosed, defined, and claimed in dependent claim 29 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement in the middle of page 4 stating "Kawabe teaches a pointing device whose upper surface is provided with a sensor pad (40a)," teaches, suggests, or discloses "wherein the polygonal edge surface further comprises n flat reflective surfaces." As noted above for dependent claim 19 Yong does not teach, suggest, or disclose a pointing device a first wheel with a polygonal edge surface rotatably mounted relative to the housing. And since Kawabe, Yong, and Ikehara are silent on "wherein the polygonal edge surface further comprises n flat reflective surfaces" the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 30, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 30 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 19.

As noted above dependent claim 31 is believed allowable as dependent upon a believed allowable independent claim. In addition, claim 31 is dependent upon dependent claim 19 that is dependent upon dependent claim 18 that is dependent upon claim 16 where 16, 18, and 19 are believed to be an allowable dependent claims.

Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "wherein the second wheel further comprises an encoder wheel having alternating reflective and non-reflective surfaces on a face surface of the encoder wheel," as it is disclosed, defined, and claimed in dependent claim 31 by Applicants in the instant specification. *Emphasis added.* Yong teaches, "[a] wheel assembly 212 may be positioned on the upper surface of the body 208 adjacent to the keys 210. The wheel assembly 212 preferably comprises a wheel, extending above the upper surface of the body 208, which may be both rotated and depressed by a user." Col. 5, lines 4-9. The wheel assembly in Yong does not teach, suggest, or disclose an encoder wheel having alternating reflective and non-reflective surfaces on a face surface as disclosed, defined and claimed in the instant specification. As noted above for dependent claim 19 Yong does not teach, suggest, or disclose a pointing device having a first wheel with a polygonal edge surface rotatably mounted relative to the housing. And since Kawabe, Yong, and Ikehara are silent on "wherein the second wheel further comprises an encoder wheel having alternating reflective and non-reflective surfaces on a face surface of the encoder wheel," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 31, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 31 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 31.

As noted above dependent claim 32 is believed allowable as dependent upon a believed allowable independent claim. In addition, claim 32 is dependent upon dependent claim 19 that is dependent upon dependent claim 18 that is dependent upon claim 16 where 16, 18, and 19 are believed to be an allowable dependent claims. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "wherein the first wheel operably couples to the first transducer utilizing reflected light and the second wheel operably couples to the second transducer utilizing reflected light," as it is disclosed, defined, and claimed in dependent claim 32 by Applicants in the instant specification. *Emphasis added.* . Yong teaches, "[a]

wheel assembly 212 may be positioned on the upper surface of the body 208 adjacent to the keys 210. The wheel assembly 212 preferably comprises a wheel, extending above the upper surface of the body 208, which may be both rotated and depressed by a user." Col. 5, lines 4-9. Applicants respectfully disagree with Examiner's statement in the middle of page 4 "[r]egarding claims 31-32, Yong teaches an input device including a wheel assembly (212)." The wheel assembly in Yong does not teach, suggest, or disclose "wherein the first wheel operably couples to the first transducer utilizing reflected light," as disclosed, defined and claimed in the instant specification. As noted above for dependent claims 19 and 31 Yong does not teach, suggest, or disclose a pointing device wherein the mechanical motion transfer mechanism further comprises: a first wheel with a polygonal edge surface rotatably mounted relative to the housing. And since Kawabe, Yong, and Ikehara are silent on "wherein the first wheel operably couples to the first transducer utilizing reflected light and the second wheel operably couples to the second transducer utilizing reflected light," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 32, and thus does not meet any of the three basic criteria that must be met to establish a *prima facie* case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 32 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 32.

As noted above dependent claim 20 is believed allowable as dependent upon a believed allowable independent claim. Further, none of the cited references Kawabe, Yong, or Ikehara, disclose, teach, or suggest, "*a rotatable disk mounted to the cable receiver; and a slot in the housing, wherein the rotatable disk protrudes through the slot,*" as it is disclosed, defined, and claimed in dependent claim 20 by Applicants in the instant specification. *Emphasis added.* Applicants respectfully disagree with Examiner's statement "see Yong's Fig. 3A and 3b (316) (350)" in Fig. 3b Yong discloses,

"the stop mechanism 326 may alternatively comprise a disk 350 having a plurality of notches 352 spaced about its periphery. A flexible pawl 354

may engage a notch 352 of the disk 350 Preferably, the disk is affixed to the shaft so that its center is coincident with the center of the spool 322 wherein the disk may turn in concert with the spool as the spool 322 is rotated by spring 342."

Col. 6, lines 56-65. Yong is silent on "a rotatable disk mounted to the cable receiver; and a slot in the housing, wherein the rotatable disk protrudes through the slot," as it is disclosed, defined, and claimed in dependent claim 20 by Applicants in the instant specification. As noted in Yong Fig. 3B is a partial cross-sectional bottom plan view of the body. As can clearly be seen in this figure there is no slot in the housing and no disk protrudes through such a slot as claimed in the instant specification. As noted above in independent claim 34 Kawabe, Yong, and Ikehara are silent on "a rotatable disk mounted to the cable receiver . . . wherein the rotatable disk protrudes through the slot," the Examiner's suggested combination (which may or may not be proper) of Kawabe, Yong, and Ikehara does not teach the present invention as recited in dependent claim 20, and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants assert that the rejection of dependent claim 20 has been overcome, and respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn for dependent claim 20.

Therefore, in view of the foregoing Amendment and Remarks, Applicants believes the present application to be in a condition suitable for allowance. Examiner is respectfully urged to withdraw the rejections, reconsider the present Application in light of the foregoing Amendment, and pass the amended Application to allowance.

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PATENT APPLICATION
Attorney Docket No: 10005131-1

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call applicant's representative at (541) 715-1694 to discuss the steps necessary for placing the application in condition for allowance.

Favorable action by the Examiner is solicited.

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